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ART UNIT	PAPER NUMBER
3714	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/644,081	OKADA, KAZUO	
	Examiner	Art Unit	
	Nikolai A. Gishnock	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/18/2003, 9/14/2006, 12/8/2006, & 12/18/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restriction

1. **The restriction requirement between Species I & II, as set forth in the Office action mailed on 10/11/2007, is hereby withdrawn**. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Priority

2. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d), certified English translations of the foreign applications must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e). Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: DIFFERENCE IMAGE DETECTION GAME SERVER.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 27, 29, & 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Computer programs claimed as listings and data structures not claimed as embodied in computer-readable media are descriptive material per se, and are non-statutory because they do not define any structural or functional interrelationships between the program and/or data structure and other elements of a manufacture or machine. The claims fail because they are not directed to a process that permits the claimed functionality to be realized. See MPEP 2106.01 (I).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 7-11, & 28 are rejected under 35 U.S.C. 102(a) as being anticipated by Goode et al. (GB 2,372,218 A), hereinafter known as Goode '218.

8. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

9. Goode '218 discloses a game server being capable of transmitting and receiving data to and from a plurality of user terminal devices (an apparatus for playing a spot-the-difference game, comprising a receiver arranged to receive a broadcast spot-the-difference competition from a broadcaster transmitting the game software, Page 3, Lines 1-11) via a communication line (the video, graphics, and/or data may for example be transmitted by means of a satellite,

cable network, terrestrial transmission, telephone network, or a cellular device, Page 4, Lines 1-3) [Claims 7, 11, & 28].

10. Goode '218 discloses image display means for simultaneously displaying a reference image for reference and a plurality of difference images on the display (invention includes a receiver to receive and display at least one pair of images, Page 1, Lines 30-34; at least one is understood to mean a plurality) [7, 11, & 28].

11. Goode '218 discloses point providing means for providing a point to a player on receipt of a correct answer from the player with a difference detection game executed on a display provided to each of the user terminal devices (the transmitting arrangement is arranged to receive signals from remote players indicative of a perceived characteristic of the video output stream, and to score said signals on the basis of a comparison with an actual characteristic of an output stream {referring to a generated mixed output image for use in a spot-the-difference game}, Page 4, Lines 23-26; scoring is understood to mean awarding points) [Claims 7 & 28].

12. Goode '218 discloses providing means for providing a point or prize to a player on receipt of a correct answer from the player with a difference detection game executed on a display provided to each of the user terminal devices (a prize may be awarded according to game structure, such as cash, credits, points, tickets, tokens, or progression to another game, Page 5, Lines 17-20) [Claim 11].

13. Goode '218 discloses image selecting means for letting the player select one difference image out of the plurality of difference images for playing the difference detection game (the player is presented with a predetermined number of images with differences and is scored according to the time he takes to find the differences in the images, Page 3, Lines 20-22; the player may select a "PASS" feature which would enable him to move to the next set of images and complete the game, Page 3, Lines 32-34) [Claims 9-11].

14. Goode '218 discloses a correspondence data set for establishing a correspondence between each of the plurality of difference images and the point or prize (the apparatus may have the means to control the play in accordance with the success of a player in correctly identifying a difference from a comparison image in order to maintain a predetermined ratio of income to pay-out, Page 5, Lines 21-24) [Claim 11].

15. Goode discloses corresponding image display means for displaying a corresponding image on the display by selecting the correspondence data set corresponding to any one of the plurality of difference images on receipt of the correct answer from the player (The player's selections are checked to see whether the selected region or regions selected are coincident with the predetermined region or regions of difference, Page 5, Lines 32-33; the machine may incorporate the means to indicate to the player, through displaying a suitable mark or other display, the area or areas the player has selected either correctly or incorrectly, Page 6, Lines 4-6) [Claim 11].

16. Goode '218 discloses wherein each of the plurality of difference images includes one difference from the reference image (one pair of images which are similar but which differ in least one respect, Page 2, Lines 4-7; at least one difference includes one difference) [Claims 9 & 10].

17. Goode '218 discloses wherein the point providing means sets an obtainable number of points for each of the plurality of difference images (the machine may optionally have the means to display the number or otherwise inform the player of visual differences discernable in the images or sets of images displayed, Page 5, Lines 12-13) [Claim 8].

18. Claims 1, 2, 7, 11-19, & 23-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanisawa et al. (US 2005/0107158 A1), hereinafter known as Kanisawa.

19. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

20. Kanisawa discloses a game server being capable of transmitting and receiving data to and from a plurality of user terminal devices via a communication line (an advertising system that provides advertising using games on information terminals (user terminals), Para. 0166; the information terminal downloads a game program from the information providing server and executes it, so that the user can play the game, Para. 0168; communication is done using wireless communication, an exclusive line, or LAN, Para. 0055) [Claims 1, 7, 11, 12, 16, 23, & 27-31].

21. Kanisawa discloses point providing means for providing a point to a player on receipt of a correct answer from the player with a difference detection game executed on a display provided to each of the user terminal devices (score computing device computes a score by carrying out predetermined calculations according to a course of a game, Para. 0013-17; score computing processing section computes the total score by adding the predefined score for the correct answer, and stores it in the game information storage section as “score information”, Para. 0148; score is understood to be defined as points) [Claims 1, 7, 27, & 28].

22. Kanisawa discloses providing means for providing a point or prize to a player on receipt of a correct answer from the player with a difference detection game executed on a display provided to each of the user terminal devices (various services using the score information may be carried out. Reward may be offered free of charge to a high scorer inside a pre-defined period, Para. 0156; free reward is understood to be a prize) [Claims 11, 12, 16, 23, 29-31].

23. Kanisawa discloses image switching means for switching and alternately displaying a reference image for reference and a difference image on the display to find differences (“Spot-

The Difference Game", Firstly, the original advertising image is displayed for a given length of time to let the user memorize the image. Then, an advertising image that is different in a few places is displayed, and the user is to spot the different places (difference), Para. 0164-165) [Claims 1, 12, 16, 24, 27, 29, & 30].

24. Kanisawa discloses switching timing setting means for setting a timing or interval for switching and alternately displaying the reference image and the difference image on the display (advertising images are employed as characters in the game; advertising image selection device that selects the advertising image having a better advertising effectiveness from the advertising image database, according to one or a plurality of information from among: information related to a store where the user terminal is installed, a period of time, a date, a day of the week, and a time elapsed from a predetermined event related to the user using the user terminal taken as a start time, both at Para. 0011-12) [Claims 2, 13, 16, 24, & 30].

25. Kanisawa discloses wherein the image switching means has a function to switch and alternately display the reference image and the difference image on the display at the timing or in accordance with the interval set by the switching timing setting means (advertising image selection means, Para. 0011-12) [Claims 2, 13, & 16].

26. Kanisawa discloses image display means for simultaneously displaying a reference image for reference and a plurality of difference images on the display ("Image Memory Game" First, a plurality of advertising images is displayed for a moment, and the user is allowed to memorize their positions. Then, the user is made to recall the positions of each advertising image, Para. 0162-163; the differences in the positions of the images is understood to constitute a difference detection game) [7, 11, & 28].

27. Kanisawa discloses image selecting means for letting the player select one difference image out of the plurality of difference images for playing the difference detection game (user is

to point out (or select) the parts of a motion picture having different movements, (Para. 0165), and a correspondence data set for establishing a correspondence between each of the plurality of difference images and the point or prize (“a reward may be offered to a high scorer, Para. 0156; because the high score corresponds with playing the game successfully, it is understood that there is a correspondence between the score and the reward) [Claim 11].

28. Kanisawa discloses corresponding image display means for displaying a corresponding image on the display by selecting the correspondence data set corresponding to any one of the plurality of difference images on receipt of the correct answer from the player (games draw attention to the advertised images, Para. 0172; advertising images that is different in a few places is displayed and the user is to spot the different places, Para. 0165) [Claims 11, 14, & 15].

29. Kanisawa discloses reference image display means for displaying a reference image for reference on the display as an animated image; difference image display means for displaying a difference image as an animated image; and image switching means for switching and alternately displaying the reference image and the difference image to find differences (The "advertising image data" is image data to be displayed as the character of the game, and also for advertising products and services. According to the mode of the game, either a still image or a motion picture may be employed for this "advertising image data", Para. 0113) [Claims 12 & 29].

30. Kanisawa discloses answer data storing means for storing answer data showing an answer with a difference detection game executed on a display provided to each of the terminal devices (the user keeps turning over cards to play the game, Para. 0147); correct answer data storing means for storing correct answer data as a criterion to determine whether or not the answer data stored in the answer data storing means matches the correct answer data (game

processing section receives game playback information and displays the game screen including the images selected, Para. 0147); and comparing means for comparing the answer data stored in the answer data storing means and the correct answer data stored in the correct answer data storing means (when the advertising images the user consecutively turned over twice are the same product, the total score is computed by adding the predefined score for the correct answer and stored, Para. 0148) [Claims 16, 23, 30, & 31].

31. Kanisawa discloses play history storing means for storing play history data with a different game than the difference detection game being provided on a display provided to each of the user terminal devices exposure count of advertising images, Para. 0153), the different game having been executed on the display before the difference detection game (Four different games are disclosed, including a spot-the-difference game, Para. 0157-0166); reference image display means for displaying a replay image of the different game as a reference image of the difference detection game based on the play history data stored in the play history storing means on the display (exposure count computing program counts the number of times an advertising image is used in a game program, Para. 0172); difference image creating means for creating a difference image of the difference detection game based on the play history data stored in the play history storing means (information relating to the price charged for every exposure per second is stored, Para. 0154; the advertising images are exposed to a user in the form of a spot-the-difference game, Para. 0164-165), the difference image being different from the replay image (advertising image is different in a in a few places form the original advertising image, Para. 0165); and image display means for displaying the difference image created by the difference image creating means on the display (Para. 0165) [Claims 23 & 31].

32. Kanisawa discloses data providing means for providing data for the plurality of terminal devices via a communication line (wireless communication, an exclusive line, or LAN, Para.

0055); reference image data storing means for storing reference image data to display the reference image for reference on the display provided to each of the terminal devices; and difference image data storing means for storing difference image data to display the difference image on the display, wherein the data providing means provides the reference image data and the difference image data for the terminal devices before executing the difference detection game on the display of each of the terminal devices (all at Para. 0168-170; the information terminal downloads a game program from the information providing server and executes it so that the user can play the game) [Claims 17, 25, & 26].

33. Kanisawa discloses image display control means for displaying the reference image or the difference image, in an enlarged manner or a reduced manner in response to an image enlarging request or an image reducing request from each of the terminal devices on the display (the gist of the present invention is that in the advertising system there is further provided an image enlargement device that enlarges the advertising image and displays it on the display section. Therefore an enlargement of the advertising image can be displayed at optional timing when the advertising image is displayed small as a character image of the game. Thus, the product image can be enlarged at times when an impression will be made with the user, and the user can be made to recognize the details of the advertising image, and the effectiveness of the advertising can be improved, Para. 0018-1; For the enlarged advertising image that the image enlargement processing section displays on the display section, when the image control processing section displays the advertising image reduced to a predefined proportion (%), the full sized "advertising image data" (or at smaller proportion) displayed is treated as the enlarged advertising image, Para. 0123) [Claims 18 & 19].

Claim Rejections - 35 USC § 103

34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

36. Claims 1, 7-12, & 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode et al. (GB 2,248,560 A), hereinafter known as Goode ‘560, in view of Walker (US 5,411,271), hereinafter known as Walker.

37. Goode ‘560 teaches providing means for providing a point or prize to a player on receipt of a correct answer from the player (When the player has successfully selected the area or areas or answer, the player may progress to another portion of the same game, another game, or the like. A prize may be awarded, such as cash, credits, points, tickets, vouchers, or the like or indeed any prize, Page 2, Line 30 through Page 3, Line 4) with a difference detection game executed on a display provided to each of the user terminal devices (a spot-the-difference competition, Page 1, Lines 2-21) [Claims 1, 7, 11, 12, & 27-29].

38. Goode ‘560 teaches image switching means for switching and alternately displaying a reference image for reference and a difference image on the display to find differences

(Incorporated in the machine will be the means to display images which may have been chosen randomly from a plurality of stored images. At least two images may be displayed, preferably simultaneously, these will be generally similar, but at least one image displayed will have been previously edited in such a way that it is made visually different in at least one respect from the corresponding image or images displayed, Page 1, Lines 11-21; It is understood that Goode '560 teaches a preferred embodiment where the images are displayed simultaneously, and another embodiment where the images are displayed non-simultaneously, or otherwise alternately) [Claims 1, 12, 27, & 29].

39. Goode '560 teaches image display means for simultaneously displaying a reference image for reference and a plurality of difference images on the display (at least two images are compared, Page 1, Lines 11-21) [7, 11, & 28].

40. Goode '560 teaches image selecting means for letting the player select one difference image out of the plurality of difference images for playing the difference detection game (for a player to respond, a player will use his skill in choosing the region or regions of the visual difference or differences preferably through the use of a display device equipped with a touch-sensitive screen, Page 2, Lines 1-8) [Claims 9-11].

41. Goode '560 teaches a correspondence data set for establishing a correspondence between each of the plurality of difference images and the point or prize (The player views at least two images wherein at least one of the images has been previously edited to differ from the corresponding image or images, Page 4, Lines 27-29) [Claim 11].

42. Goode '560 teaches corresponding image display means for displaying a corresponding image on the display by selecting the correspondence data set corresponding to any one of the plurality of difference images on receipt of the correct answer from the player (The computer determines the accuracy of the player's selection and a visual display may be produced on the

display device by the computer and/or the data storage device in order to demonstrate the predetermined areas of difference on the images, Page 5, Lines 1-5) [Claim 11].

43. What Goode ‘560 fails to teach is a game server being capable of transmitting and receiving data to and from a plurality of user terminal devices via a communication line [Claims 1, 7, 11, 12, & 27-29]. However, Walker teaches a gaming device for playing a matching game, comprising a processor in communication with a data storage device, which may be located in a single computing device, connected by a remote communication link, such as a serial port cable, a telephone line, or a radio frequency transceiver, or a combination thereof. The gaming device may also comprise one or more computers connected to a remote server computer for maintaining databases (3:24-36). The game taught by Goode ‘560 would be implemented in the computing device described by Walker. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have implemented the game of Goode ‘560 in the game server taught by Walker, and to connect the game server to computing devices via a communications line, as taught by Walker, in order to accurately maintain databases of images, points, and prizes [Claims 1, 7, 11, 12, & 27-29].

44. What Goode ‘560 further fails to teach is reference image display means for displaying a reference image for reference on the display as an animated image; and difference image display means for displaying a difference image as an animated image; and image switching means for switching and alternately displaying the reference image and the difference image to find differences [Claims 12 & 29]. However, Goode ‘560 teaches where a series of still or moving images may be displayed on the display device, inviting an entrant to play (Page 4, Lines 16-19). Also, Walker teaches a game server in which game elements are animated representations (13:56-62). The game of Goode '560 would use animated as well as still images. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the

invention was made, to use animated as well as still images for the reference and difference images in the game of Goode '560, as taught by Walker, etc., in order to make The game look more attractive to an entrant, and to make the game more difficult for a player to track the image elements that are in motion before they are concealed [Claims 12 & 29].

45. What Goode '560 further fails to explicitly teach is image switching means for switching and alternately displaying the reference image and the difference image to find differences [Claims 12 & 29]. However, Walker teaches where elements may be replaced by identical elements or different elements, in a game (14:24-45). The reference and difference images in the game of Goode '560 would be alternately replaced as described in Walker. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have included image switching means as described by Walker, in the difference detection game of Goode '560, in order to provide an incentive for the player to continue playing, to get a preferred image displayed or a preferred prize enabled to be won [Claims 12 & 29].

46. Goode '560 teaches wherein the point providing means sets an obtainable number of points for each of the plurality of difference images (The machine may incorporate the means to display the number or otherwise inform the player of visual differences discernable in the images or sets of images displayed, Page 1, Lines 22-24) [Claim 8].

47. Goode '560 teaches wherein each of the plurality of difference images includes one difference from the reference image (at least one image displayed is made visually different in at least one respect from the corresponding image or images displayed, Page 1, Lines 11-21) [Claims 9 & 10].

48. Claims 2, 13, 16, & 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode '560, in view of Walker, as applied to claims 1, 7, 11, & 12 above, and further in view of Mirando (US 5,411,271 A), hereinafter known as Mirando.

49. Goode ’560 and Walker teach all the features of claims 1, 7, 11, & 12, as demonstrated above. Goode ‘560 teaches wherein the image switching means has a function to switch and alternately display the reference image and the difference image on the display at the timing or in accordance with the interval set by the switching timing setting means (A timing device may be employed by the machine in order to limit or control the amount of time the player has to view the display, or choose the location of the visual difference or differences, Page 1, Lines 25-28) [Claims 2, 13, & 16].

50. What Goode ‘560 and Walker fail to teach is switching timing setting means for setting a timing or interval for switching and alternately displaying the reference image and the difference image on the display [Claims 2, 13, 16, & 30]. However, Mirando teaches an electronic video match game, having timing means for the sequence of play (See Figure 3A, Item 43), where the "Timer" parameter allows the operator to change the game time from 20 to 60 seconds in 5 second intervals (5:14-24). The game timer taught by Mirando is used to control the amount of time given to correctly match images and acquire points in the game (5:48-6:19). When the game ends {i. e., the time runs out}, tickets are awarded to a player based on the points acquired (6:20-27). The timing setting means taught by Mirando would be used to set the timing device used in the game of Goode '560, to limit or control the amount of time the player has to view the display of visual difference images. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to Have included the setting means of Mirando in the switching timing means of the game of Goode ‘560, in light of the teachings of

Walker, in order to allow a game operator to customize the game settings in order to adjust the difficulty and payout of the computer game [Claims 2, 13, 16, & 30].

51. Goode '560 teaches answer data storing means for storing answer data showing an answer with a difference detection game executed on a display provided to each of the terminal devices (means for a player to select the area or areas where differences occur and means to determine the player's selection, Page 1, Lines 16-18; a data storage device which stores the programme of the game, Page 3, Lines 31-36; also, The computer may then display a on the screen a marker indicating the area or areas selected, Page 4, Lines 35-36); correct answer data storing means for storing correct answer data as a criterion to determine whether or not the answer data stored in the answer data storing means matches the correct answer data (the computer determines the accuracy of the player's selection, Page 5, Lines 1-5); and comparing means for comparing the answer data stored in the answer data storing means and the correct answer data stored in the correct answer data storing means (means to determine the relationship between the player's selection and the predetermined area or areas or nature of the observable differences, Page 3, Lines 19-22) [Claims 16 & 30].

52. Claims 3 & 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode '560, in view of Walker and Mirando, as applied to claims 1 & 2 above, and further in view of Klingberg.

53. Goode '560 and Walker teach all the features of claims 1 & 2, as demonstrated above. What Goode '560 further fails to teach is player identification means for identifying the player to play the difference detection game [Claim 3]. However, Walker teaches the use of a player tracking card to identify a player or to indicate the presence of a player (17: 29-41). The player identification tracking taught by Walker would be incorporated into the game of Goode '560, to

track a player's credit balance and cash-outs. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include player identification means for identifying the player to play the difference detection game, as taught by Walker, in the difference detection game of Goode '560, in light of the teachings of Mirando, in order to allow a player to receive points or prizes, such as a cash-out, in the form of a credit balance associated with the player [Claim 3].

54. What Goode '560, Walker, and Mirando fail to teach is play-number storing means for storing a play-number data indicating a number of times that the player plays the difference detection game, and number-comparing means for comparing a reference-number data as a criterion to determine whether or not the player identified by the player identification means has frequently played the difference detection game and the play-number data that has been stored in the play-number storing means, wherein the switching timing setting means sets the timing in accordance with a comparison result by the number-comparing means [Claim 3]. However, Klingberg teaches a computer game having an adaptive training feature, in which the computer evaluates the answer and then presents a subsequent task of a higher difficulty level, if one or more preceding tasks of the current level has been solved by the user. If a task is answered incorrectly, the subsequent task will be of a lower level (all at 5:13-59). The game of Klingberg thus stores the number of times a task of the current level has been completed by a user, and adjusts the subsequent difficulty of the next task in accordance. This adaptive training taught by Klingberg would be used to set the switching timing of the game of Goode '560, such as by a timer parameter taught by Mirando, in light of the player identification tracking of Walker, in order to make the user motivated by keeping the tasks neither too difficult nor too simple. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to incorporate play-number storing means for storing a play-number data indicating

a number of times that the player plays the difference detection game, and number-comparing means for comparing a reference-number data as a criterion to determine whether or not the player identified by the player identification means has frequently played the difference detection game and the play-number data that has been stored in the play-number storing means, wherein the switching timing setting means sets the timing in accordance with a comparison result by the number-comparing means, as taught by Klingberg, into the difference detection game server of Goode '560, in light of the teachings of Walker and Mirando, in order 67to keep a user of the game from getting too bored [Claim 3].

55. What Goode ‘560 fails to teach is hint image display control means for displaying a hint image to assist the player to find a correct answer on the display in accordance with the comparison result by the number-comparing means or the numerical value comparing means [Claim 5]. However, Walker teaches where a player may select a "Clue" symbol, to assist a player by highlighting losing symbol combinations. The symbols are highlighted based on one or more of the remaining symbols and the current jackpot (15:28-41), that may depend on the status of the game and/or payment of a fee (8:33-37). Thus, the hint is understood to be in accordance with the number comparing and numerical value comparing means. The “clue” selection of Walker would be used in the game taught by Goode ‘560 to highlight a difference while still allowing the possibility of making an incorrect selection. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include the hint image display control means for displaying a hint image to assist the player to find a correct answer on the display in accordance with the comparison result by the number-comparing means or the numerical value comparing means taught by Walker in the difference detection image game server of Goode ‘560, in light of the teachings of Mirando and Klingberg, in order to

convince players to play the game for a longer period of time by giving them some control over game elements [Claim 5].

56. Claims 4 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode '560, in view of Walker and Mirando, as applied to claims 1 & 2 above, and further in view of Baerlocher (US 6,749,502 B2), hereinafter known as Baerlocher.

57. Goode ‘560 and Walker teach all the features of claims 1 & 2, as demonstrated above. What Goode ‘560 further fails to teach is player identification means for identifying the player to play the difference detection game [Claim 4]. However, Walker teaches the use of a player tracking card to identify a player or to indicate the presence of a player (17: 29-41). The player identification tracking taught by Walker would be incorporated into the game of Goode ‘560, to track a player’s credit balance and cash-outs. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include player identification means for identifying the player to play the difference detection game, as taught by Walker, in the difference detection game of Goode ‘560, in light of the teachings of Mirando, in order to allow a player to receive points or prizes, such as a cash-out, in the form of a credit balance associated with the player [Claim 4].

58. What Goode ‘560 further to fails to teach is winning-number storing means for storing a numerical value data of acquired points or prizes for winning with the difference detection game played by the player; and numerical value comparing means for comparing a reference numerical value data as a criterion to determine whether or not the player identified by the player identification means has won a large number of points or prizes with the difference detection game and the numerical value data stored in the winning-number storing means [Claim 4]. However, Walker teaches where a player identification device tracks a player’s credit

balance, and identifies whether the player has won a large number of points or prizes playing the game (If the player presses a “Cashout” button, a message may flash on the screen: “Are you sure you want to cash out? This will clear the grid!”, 17:18-41), by comparing a reference numerical value as a criterion (i.e., such as where the player’s credit balance equals zero, 17:18-41). The player's credit balance would be stored in the game machine and used as a comparison as to when to initialize the machine, such as when a player cashes out. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include winning-number storing means and numerical value comparing means, as taught by Walker, in the difference image detection game server of Goode ‘560, in light of the teachings of Mirando, in order to initialize the game after the machine has been vacated by another player, in order to prevent players from perceiving that such a game is in a “good” state, or in a more ideal state to play than a similar machine, so that all such machines will be used evenly [Claim 4].

59. What Goode ‘560, Walker, and Mirando fail to teach is wherein the switching timing setting means sets the timing in accordance with a comparison result by the numerical value comparing means [Claim 4]. However, Baerlocher teaches an images matching gaming device in which the game counts the number of matches and provides the player an award such as credits based on the number of matches or a value associated with the matches, and where the game continues as long as the player continues to make matches; however, the game terminates if the player is unable to make a match (6:24-41). The game tracks and displays the number of matches made (8:3-12). The game display is understood to set the timing in the sense that making more successful matches prolongs the game and increases the prize amount. The timing setting means taught by Mirando would set the timing means of the game of Goode '560 in accordance with the determination that a player, identified by the player identiciation taught by Walker, has won a large number of prizes, as indicated by the number of

successful matches stored in a match value, as taught by Bearlocher. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to set the timing in accordance with a comparison result by the numerical value comparing means, as taught by Baerlocher, in the difference image detection game taught by Goode ‘560, in light of the teachings of Walker and Mirando, in order to provide a player more enjoyment and entertainment from the gaming device, by adjusting the difficulty by retiming the game in response to the number of points or prizes a player has previously won [Claim 4].

60. What Goode ‘560 further fails to teach is hint image display control means for displaying a hint image to assist the player to find a correct answer on the display in accordance with the comparison result by the number-comparing means or the numerical value comparing means [Claim 6]. However, Walker teaches where a player may select a "Clue" symbol, to assist a player by highlighting losing symbol combinations. The symbols are highlighted based on one or more of the remaining symbols and the current jackpot (15:28-41), that may depend on the status of the game and/or payment of a fee (8:33-37). Thus, the hint is understood to be in accordance with the number comparing and numerical value comparing means. The “clue” selection of Walker would be used in the game taught by Goode ‘560 to highlight a difference whicle still allowing the possibility of making an incorrect selection. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include the hint image display control means for displaying a hint image to assist the player to find a correct answer on the display in accordance with the comparison result by the number-comparing means or the numerical value comparing means taught by Walker in the difference detection image game server of Goode ‘560, in order to convince players to play the game for a longer period of time by giving them some control over game elements [Claim 6].

61. Claims 14 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode '560, in view of Walker and Mirando, as applied to claims 12 & 13 above, and further in view of Leyva et al. (US 6,663,392 B2), hereinafter known as Leyva.

62. Goode '560, Walker and Mirando teach all the features of claims 12 & 13, as demonstrated above. What Goode '560, Walker, and Mirando fail to teach is a cumulative number-comparing storing means for cumulatively storing a number of times that the reference image and the difference image are alternatively displayed on the display by the image switching means; and corresponding image display means for displaying a corresponding image on the display by selecting one data set from the plurality of correspondence data sets corresponding to the difference images based on the number of times stored in the cumulative number-comparing storing means on receipt of the correct answer from the player [Claims 14 & 15]. However, Leyva teaches a computer game in which a subject is sequentially presented with pluralities of images and asked to remember the images, and where the process of displaying images and asking the subject to remember the images is repeated n-1 times, where n is stored as a matrix (2:31-54). The subject is then presented with an nth image, and is asked to select the analogous image from a final plurality of images (2:55-61). The test is then scored, and teh software adjusts the presentation of the subsequent plurality of images based upon the results of previous portions of the test (3:33-43). Thus, Leyva teaches storing the number of times images in the game are alternatively displayed {as n}, and selecting a subsequent corresponding image data set {the final plurality of selection images} based on n. The number comparing means as suggested by Leyva would be used to count the number of times the game of Goode '560 presents an image to a user and asks him/her to remember it. The final image set would be selected based on the number of images the user previously attempted to remember. Therefore, it would have been obvious to one of ordinary skill in the art, at the time

the invention was made, to include a cumulative number-comparing storing means for cumulatively storing a number of times that the reference image and the difference image are alternatively displayed on the display by the image switching means; and corresponding image display means for displaying a corresponding image on the display by selecting one data set from the plurality of correspondence data sets corresponding to the difference images based on the number of times stored in the cumulative number-comparing storing means on receipt of the correct answer from the player, as taught by Leyva, in the difference image detection game of Goode ‘560, in light of the teachings of Walker and Mirando, in order to require a subject to recall order of selection of the items, for adding an additional measurement of memory which would make the game both more difficult and more interesting for the user [Claims 14 & 15].

63. Claims 17-26 & 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode '560, in view of Walker and Mirando, as applied to claim 16 above, and further in view of Egan et al. (GB 2,231,189 A), hereinafter known as Egan, and further in view of McArthur (GB 2,229,371 A), hereinafter known as McArthur.

64. Goode ‘560, Walker, and Mirando teach all the features of claism as demonstrated above. What Goode ‘560, Walker, and Mirando fail to teach is play history storing means for storing play history data with a different game than the difference detection game being provided on a display provided to each of the user terminal devices, the different game having been executed on the display before the difference detection game [Claims 23 & 31]. However, Egan teaches a spot-the-ball arcade console game having another distinct game incorporated in the machine, such as a “fruit machine” or other similar game may be played initially and where credits or points scored during the other game may be utilized to activate the spot-the-ball game (Page 7, Line 27 through Page 8, Line 5). The “fruit machine” or similar game taught by Egan

would be played on the same console to activate the difference detection game of Goode ‘560, in light of the teachings of Walker and Mirando, in order to provide additional amusing features of the console. What Goode ‘560, Walker, Mirando, and Egan fail to explicitly teach is where reference image display means for displaying a replay image of the different game as a reference image of the difference detection game based on the play history data stored in the play history storing means on the display, and difference image creating means for creating a difference image of the difference detection game based on the play history data stored in the play history storing means, the difference image being different from the replay image; and image display means for displaying the difference image created by the difference image creating means on the display [Claims 23 & 31]. However, McArthur teaches a spot-the-ball arcade console game, explicitly teaching the stored display of a replay image, indicating the difference in the reference image that was not earlier displayed (Page 5, Line 31 through Page 6, Line 5). McArthur further teaches a video mixer, which randomly selects game images from storage disk in the game machine, and generates an image difference by causing the image of the ball to be removed from the final frame (Page 4, Line 27 through Page 5, The "fruit machine" or similar game of Egan, having been previously played on the console game of Goode '560, would provide reference and difference images, which would then be replayed as in the teachings of McArthur, for providing additional, personalized reference images in the game of Goode '560, in light of the teachings of Mirando, in order to provide additional amusement to the game player. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to incorporate play history storing means for storing play history data with a different game than the difference detection game being provided on a display provided to each of the user terminal devices, the different game having been executed on the display before the difference detection game, as taught by Egan, and displaying a replay image of the

different game as a reference image of the difference detection game based on the play history data, and difference image creating means for creating a difference image of the difference detection game based on the play history data stored in the play history storing means, the difference image being different from the replay image; and image display means for displaying the difference image created by the difference image creating means on the display, as taught by McArthur, in the difference image detection console game of Goode '560, in light of the teachings of Walker and Mirando, in order to provide fresh, familiar reference images for use in the difference detection game, in order to keep a player occupied and further amused by the game for a longer time [Claims 23 & 31].

65. Goode '560 teaches answer data storing means for storing answer data showing an answer with a difference detection game executed on a display provided to each of the terminal devices (means for a player to select the area or areas where differences occur and means to determine the player's selection, Page 1, Lines 16-18; a data storage device which stores the program of the game, Page 3, Lines 31-36; also, The computer may then display a on the screen a marker indicating the area or areas selected, Page 4, Lines 35-36); correct answer data storing means for storing correct answer data as a criterion to determine whether or not the answer data stored in the answer data storing means matches the correct answer data (the computer determines the accuracy of the player's selection, Page 5, Lines 1-5); and comparing means for comparing the answer data stored in the answer data storing means and the correct answer data stored in the correct answer data storing means (means to determine the relationship between the player's selection and the predetermined area or areas or nature of the observable differences, Page 3, Lines 19-22) [Claims 23 & 31].

66. Walker teaches data providing means for providing data for the plurality of terminal devices via a communication line (each of the gaming devices is in communication with a

network server, 4:54-65; gaming devices include a data storage for game program elements, 4:14-29, see also Figure 1, Item 14; communication lines, 5:13-26); reference image data storing means for storing reference image data to display the reference image for reference on the display provided to each of the terminal devices and difference image data storing means for storing difference image data to display the difference image on the display (selected elements may be replaced by identical elements or different elements in a image matching game, and the replacement symbols may be displayed to the player as incentive to continue playing, 14:24-45; also, the display may comprise an image or picture, chosen by the casino or provided by a player, 20:32-45), and wherein the data providing means provides the reference and difference image data for the terminal devices before executing the game on the display of each of the terminal devices (the set of possible elements may be initialized according to player's choice. For example, at the start of each game, a player might choose whether he would like to keep selecting from the grid of the last game, or whether he would like to select from an initialized grid, 16:32-43) [Claims 17, 25, & 26].

67. What Goode '560, Walker, and Mirando further fail to teach is an image display control means for displaying the reference image or the difference image, in an enlarged manner or a reduced manner in response to an image enlarging request or an image reducing request from each of the terminal devices on the display [Claims 18 & 19], and number-of-times-of-enlargement storing means for storing a number of times that the image display control means displays the reference image or the difference image in an enlarged manner; and where correspondence data sets corresponding to the difference images are selected according to the number of times of displaying in an enlarged manner stored in the number-of-times-of-enlargement storing means on determination that the answer data is correct as a comparison result by the comparing means [Claims 20-22]. However, McArthur teaches a spot-the-ball

game having means for enlarging the display of a spot-the-ball image, with the image centered on the ball position, and where a scoring grid is superimposed on the enlarged display (Page 2, Lines 25-30). The game image of Goode '560 would be displayed in an enlarged fashion as taught by McArthur, for more accurate determination of the player's degree of success. It is understood that the scoring grid stores the number of times the image was enlarged, which would be scored as magnification on the grid. McArthur further teaches that the player prize amount is dependent upon the accuracy of the player's deductions about the ball position, displayed as “direct hits” and “near misses”, indicated by marks on the scoring grid or series of concentric circles (Page 2, Line 31 through Page 3, Line 1). McArthur thus teaches that the correspondence data sets {e.g. the next reference or difference images displayed} are selected based upon the number of times of enlargement and the determination of answer correctness, because the final display image is of the reference image, plus the location of the ball {the difference image}, plus the scoring grid {showing the number of times the image was enlarged}, and plus the indication of correctness {the prize awarded}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have included an image display control means for displaying the reference image or the difference image, in an enlarged manner or a reduced manner in response to an image enlarging request or an image reducing request from each of the terminal devices on the display, and number-of-times-of-enlargement storing means for storing a number of times that the image display control means displays the reference image or the difference image in an enlarged manner; and where correspondence data sets corresponding to the difference images are selected according to the number of times of displaying in an enlarged manner stored in the number-of-times-of-enlargement storing means on determination that the answer data is correct as a comparison result by the comparing means, as taught by McArthur, in the difference detection game of

Goode '560, in light of the teachings of Walker, Mirando, and Egan, in order to display a more accurate indication of the player's degree of success, in order to cause an element of skill to function as a prize determination modifier, which adds to the amusement provided to a player of the game machine [Claims 18-22].

Conclusion

68. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dickinson et al. (US 6,287,197 B1) discloses a difference image detection video game having difference image creation means for increasing a plurality of differences images by modifying a small number of base images in various ways. Ballhorn et al. (WO 97/10578 A1) discloses a game apparatus having picture sequences randomly combined on a monitor to attempt to produce meaningful or coherent pictures, which represent successful outcomes. Goode et al. (GB 2,271,262 A) and Lambert (GB 2,105,560 A) disclose a a spot-the-ball competition which the apparatus displays a video sequence followed by a still image edited to remove an element; the user then indicates a selected position on the display, which is compared by the computer to the true position of the element to determine an outcome.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikolai A. Gishnock whose telephone number is (571)272-1420. The examiner can normally be reached on M-F 8:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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